U.S. Application No. 10/505,376 Attorney Docket No. 08201.0028-00000

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

- (Currently Amended) A method of treating a neurodegenerative immunological disorder, comprising administering to a mammal a therapeutically effective amount of <u>a soluble_BCMA_polypeptide</u>, an antibody against a BCMA_ligand, or an antibody against BCMA, thereby treating the disorder.
 - 2. The method of claim 1, wherein the disorder is multiple sclerosis.
- 3. (Currently Amended) A method of treating demyelination in a mammal, comprising administering a therapeutically effective amount of <u>a soluble BCMA_Dolypeptide</u>, an antibody against a BCMA ligand, or an antibody against BCMA, thereby treating demyelination, wherein the mammal has or is at risk for developing multiple sclerosis.
- 4. (Currently Amended) A method of treating CNS inflammation in a mammal, comprising administering a therapeutically effective amount of <u>a soluble</u> BCMA <u>polypeptide</u>, an antibody against a BCMA ligand, or an antibody against BCMA, thereby treating CNS inflammation, wherein the mammal has or is at risk for developing multiple sclerosis.
- 5. (Currently Amended) A method of reducing a CNS-specific autoantibody titer in a mammal, comprising administering a therapeutically effective amount of <u>a soluble BCMA polypeptide</u>, an antibody against a BCMA ligand, or an antibody against BCMA, thereby reducing the CNS-specific autoantibody titer wherein the mammal has or is at risk for developing multiple sclerosis.

- The method as in any one of claims 1-5, wherein the mammal has or is at risk for diabetes.
 - 7. The method as in any one of claims 1-5, wherein the mammal is human.
- (Currently Amended) The method as in any one of claims 1-5, wherein the <u>soluble BCMA polypeptide</u> comprises a polypeptide comprising a ligand-binding domain of SEQ ID NO:1.
- (Currently Amended) The method of claim 8, wherein the <u>soluble BCMA</u>
 polypeptide comprises an amino acid sequence substantially identical to amino acids 1-51 of SEQ ID NO:1.
- (Currently Amended) The method of claim 8, wherein the <u>soluble BCMA</u> polypeptide comprises amino acids 8-41 of SEQ ID NO:1.
- (Currently Amended) The method of claim 8, wherein the <u>soluble BCMA</u> polypeptide comprises amino acids 1-51 of SEQ ID NO:1.
- (Currently Amended) The method of claim 8, wherein the soluble BCMA.
 polypeptide comprises the amino acid sequence as in SEQ ID NO:3.
- 13. (Currently Amended) The method of claim 8, wherein the soluble BCMA polypeptide comprises:
 - (a) a portion of the amino acid sequence of SEQ ID NO:1; or
 - (b) an amino acid sequence encoded by a nucleic acid that is at least 60 nucleotides long and hybridizes to the nucleic acid encoding (a) under defined conditions:

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wherein the polypeptide is capable of specifically binding APRIL or BAFF, or both.

- 14. The method of claim 13, wherein the defined conditions comprise pretreating for 8 hours at 65°C in a solution comprising 6 x SSC, 50 mM Tris-HCl (pH 7.5), 1 mM EDTA, 0.02% PVP, 0.02% FicoII, 0.02% BSA, and 500 μ g/ml denatured salmon sperm DNA; hybridizing for 48 hours at 65°C; and washing for 1 hour at 37°C in a solution comprising 2 x SSC, 0.01% PVP, 0.01% FicoII, and 0.01% BSA and for 45 minutes at 50°C in a solution comprising 0.1 x SSC.
- The method of claim 8, wherein the polypeptide further comprises a Fc fragment of IgG1 or a Fc fragment of IgG4.
- 16. A method for identifying a compound effective for treatment of a neurodegenerative immunological disorder, the method comprising:
 - (a) preparing a first binding mixture comprising the polypeptide as in claim 8 and a BCMA ligand;
 - (b) measuring the amount of binding between the polypeptide and the BCMA ligand in the first mixture;
 - preparing a second binding mixture comprising the polypeptide and the BCMA ligand;
 - (d) measuring the amount of binding between the polypeptide and the BCMA ligand in the second mixture; wherein difference in the amount of binding measured in (b) and (d) above a predetermined threshold is indicative of the test compound being effective for treatment of a neurodegenerative immunological disorder:

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(e) testing the compound identified in (d) in at least one animal model of multiple sclerosis.

- 17. (Currently Amended) A method of treating a subject in need for treatment ef-in need of treatment for multiple sclerosis, the method comprising administering soluble BCMA to the subject in an amount and for a period of time sufficient to delay onset of acute phase of the disease.
- 18. (Currently Amended) A method of treating a subject in need for treatment ef-in need of treatment for multiple sclerosis, the method comprising administering soluble BCMA to the subject in an amount and for a period of time sufficient to reduce rate of relapses.
- (Currently Amended) The method of claim 17 or 18, wherein the soluble
 BCMA comprises an amino acid sequence as set out in SEQ ID NO:3 from amino acid-24 to amino acid-74 amino acids 24-74 of SEQ ID NO:3.
- The method of claim 19, wherein the soluble BCMA further comprises an
 Fc region of human Ig.
 - 21 23. Cancelled.